

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P938306

Luminaire Tested: SQ4-FB-150U-050D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938306
REPORT IS A COMBINATION OF REPORTS P933629 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

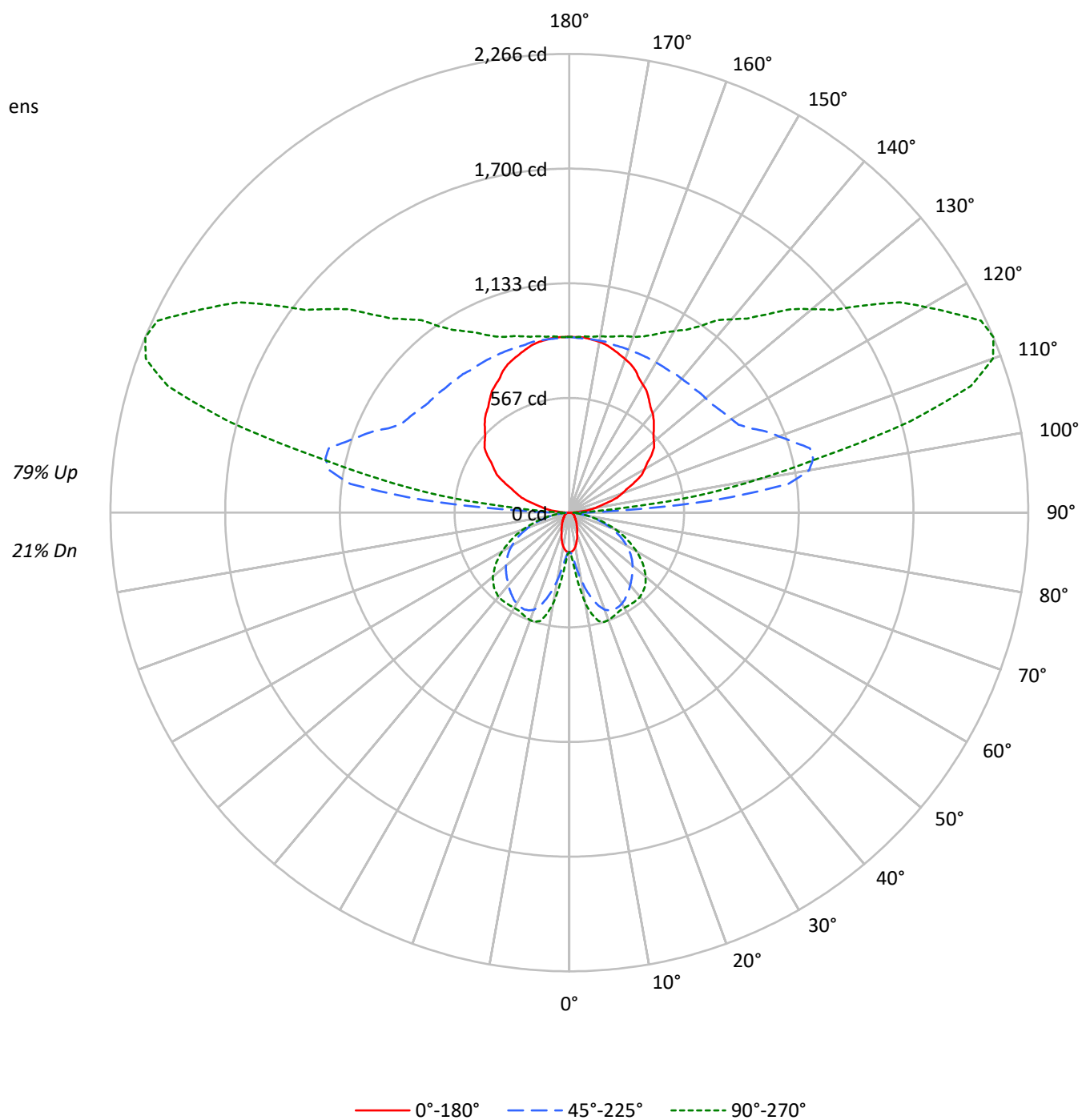
Lumens per Lamp: N/A
Luminaire Lumens: 7137.7 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30	30	30	21
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24	24	24	17
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	20	20	14
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17	17	17	12
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14	14	14	10
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12	12	12	8
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11	11	11	7
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9	9	9	6
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8	8	8	5
9	45	34	26	21	40	30	24	19	23	18	15	17	13	11	10	9	7	7	7	5
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6	6	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2430
10°	1599	3042	4029
15°	1357	3971	4866
20°	1104	4599	4959
25°	920	4809	4858
30°	774	4835	4849
35°	684	4751	4974
40°	596	4644	5103
45°	536	4563	5124
50°	492	4489	5039
55°	470	4384	4815
60°	479	4186	4463
65°	496	3887	3977
70°	523	3383	3362
75°	577	2751	2623
80°	618	1902	1768
85°	522	1004	903

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5124 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.2	0.4
10°-20°	111.7	1.6
20°-30°	195.4	2.7
30°-40°	251.5	3.5
40°-50°	281.0	3.9
50°-60°	269.1	3.8
60°-70°	213.3	3.0
70°-80°	125.4	1.8
80°-90°	38.2	0.5
90°-100°	423.1	5.9
100°-110°	1112.4	15.6
110°-120°	1153.4	16.2
120°-130°	925.2	13.0
130°-140°	725.9	10.2
140°-150°	557.2	7.8
150°-160°	401.3	5.6
160°-170°	245.5	3.4
170°-180°	82.9	1.2
0°-30°	332.3	4.7
0°-40°	583.9	8.2
0°-60°	1134.0	15.9
0°-90°	1510.8	21.2
90°-120°	2688.9	37.7
90°-150°	4897.1	68.6
90°-180°	5627.0	78.8
0°-180°	7137.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	195	195	195	195	195	
5°	190	204	229	259	269	18
15°	142	262	442	536	553	40
25°	91	298	527	550	551	42
35°	61	284	496	524	545	38
45°	42	227	439	502	525	32
55°	30	144	372	432	444	27
65°	24	76	276	311	315	24
75°	18	47	152	167	167	18
85°	6	14	38	41	42	7
90°	6	16	44	22	22	5
95°	56	219	729	376	256	62
105°	200	304	1230	1867	1742	212
115°	356	432	985	1965	2243	352
125°	495	555	896	1514	1786	440
135°	590	650	868	1222	1386	457
145°	684	728	857	1043	1124	429
155°	774	795	857	941	968	355
165°	835	846	857	891	902	236
175°	868	868	863	874	874	82
180°	868	868	868	868	868	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8	194.8
2.5°	194.8	194.8	196.1	196.7	198.0	198.7	199.9	201.1	204.9	205.5	206.8
5°	189.9	192.4	200.5	203.6	212.4	224.3	229.3	237.5	254.4	259.4	262.5
7.5°	182.3	188.0	208.0	213.0	235.0	266.3	279.5	297.0	323.9	337.1	347.7
10°	170.5	182.3	218.1	230.0	265.6	313.3	337.7	362.2	402.9	421.0	428.0
12.5°	157.3	176.7	228.7	245.0	296.4	365.9	395.4	422.4	468.7	493.2	496.9
15°	142.2	168.6	238.7	262.5	329.0	409.7	442.3	475.6	518.8	536.3	540.7
17.5°	129.1	162.3	248.2	273.2	354.0	449.3	482.5	510.1	545.1	557.0	560.1
20°	112.8	152.2	254.4	287.0	380.3	478.1	510.1	531.4	555.2	562.6	563.9
22.5°	100.9	141.6	258.2	292.0	397.9	495.6	522.6	539.5	555.7	558.3	558.9
25°	90.9	129.7	257.5	297.7	412.9	506.2	527.0	539.5	548.9	550.1	550.1
27.5°	81.4	116.6	255.0	298.9	424.2	508.7	525.1	533.9	538.3	540.7	540.7
30°	73.3	104.0	248.7	296.4	429.2	506.2	519.4	523.8	528.2	532.0	533.9
32.5°	67.1	92.1	239.4	291.3	429.8	500.0	509.4	511.9	518.2	527.0	530.0
35°	61.4	80.2	228.7	284.5	426.1	490.0	496.2	498.8	511.3	524.4	528.8
37.5°	55.8	71.5	214.9	272.5	420.4	478.1	482.5	486.9	506.2	521.9	527.0
40°	50.2	63.9	198.7	259.4	411.7	463.6	467.5	474.3	500.0	518.2	523.2
42.5°	45.8	57.6	181.1	245.6	400.4	447.4	453.0	463.1	492.5	511.9	517.5
45°	41.9	51.4	162.3	226.8	385.9	430.5	438.6	452.4	483.7	502.5	507.5
47.5°	38.2	47.0	142.9	207.4	370.3	413.6	424.2	439.8	471.9	490.0	494.4
50°	35.1	42.6	123.5	186.7	353.4	395.4	407.9	424.2	456.8	473.7	479.3
52.5°	32.6	38.9	105.3	166.1	334.0	376.6	391.0	407.9	438.6	454.9	458.7
55°	30.1	35.7	89.6	144.1	313.9	356.5	372.2	388.5	418.5	432.3	434.9
57.5°	28.9	33.3	76.4	123.5	292.6	334.0	351.5	366.5	394.7	405.4	407.9
60°	26.9	31.3	66.4	105.9	269.5	312.7	327.7	342.8	366.5	375.3	377.2
62.5°	25.0	30.1	58.9	89.0	245.6	287.6	302.6	316.4	336.4	342.8	345.2
65°	23.8	28.9	53.2	76.4	221.2	261.2	276.3	288.2	304.5	310.7	312.0
67.5°	22.6	27.6	48.8	65.8	196.7	235.0	246.2	257.5	270.0	276.3	276.9
70°	20.6	26.3	45.1	58.3	171.7	204.9	214.3	226.2	236.2	239.4	241.3
72.5°	19.4	24.5	42.6	52.7	146.0	176.1	184.8	191.8	200.5	203.6	203.6
75°	17.6	21.9	40.1	47.0	119.6	144.1	151.6	158.5	165.4	166.6	164.8
77.5°	15.7	19.4	34.5	39.5	93.4	114.0	120.3	124.0	129.7	130.9	131.6
80°	13.2	16.9	26.9	30.7	67.7	84.0	88.4	91.4	96.5	96.5	97.8
82.5°	10.0	13.2	19.4	21.9	45.8	57.6	61.4	63.3	66.4	66.4	66.4
85°	6.3	8.1	12.5	14.4	27.6	35.1	37.6	38.2	40.7	41.4	41.4
87.5°	3.2	4.4	8.1	8.8	14.4	18.2	18.2	19.4	19.4	18.8	18.2
90°	5.8	10.5	15.1	16.3	25.7	38.1	44.3	39.3	29.5	22.1	22.1
92.5°	23.3	62.9	102.6	112.5	158.0	218.8	249.3	218.5	156.9	110.7	106.3
95°	55.9	128.4	200.9	219.0	388.9	615.5	728.8	650.3	493.4	375.7	362.4
97.5°	96.7	160.6	224.6	240.6	523.9	901.7	1090.5	1040.9	941.8	867.4	842.0
100°	128.1	186.1	244.1	258.6	573.0	992.2	1201.8	1205.4	1212.7	1218.1	1187.9
102.5°	155.0	209.1	263.2	276.7	595.6	1020.7	1233.3	1296.4	1422.8	1517.6	1491.7
105°	200.4	246.3	292.1	303.6	612.2	1023.9	1229.7	1371.3	1654.6	1867.1	1853.1
107.5°	247.0	289.7	332.5	343.2	615.4	978.4	1159.8	1357.4	1752.5	2048.8	2052.2
110°	278.4	317.0	355.7	365.3	610.7	937.9	1101.6	1322.5	1764.1	2095.4	2109.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.3	346.1	382.9	392.1	610.9	902.7	1048.6	1274.6	1726.7	2065.7	2088.0
115°	355.9	389.9	423.8	432.3	616.5	862.3	985.1	1202.8	1638.3	1964.9	1995.9
117.5°	402.0	432.8	463.6	471.3	628.0	837.0	941.4	1137.9	1530.9	1825.7	1860.0
120°	428.7	457.8	486.7	494.0	637.3	828.4	923.9	1103.4	1462.6	1731.9	1765.2
122.5°	455.0	484.2	513.5	520.8	650.7	824.0	910.6	1072.2	1395.6	1638.1	1670.9
125°	495.2	521.8	548.5	555.2	668.7	820.2	896.0	1033.3	1308.0	1514.0	1544.3
127.5°	527.8	554.7	581.6	588.3	686.8	818.1	883.8	1001.7	1237.6	1414.4	1439.9
130°	545.3	574.2	603.2	610.5	700.0	819.4	879.1	984.1	1194.0	1351.5	1375.0
132.5°	563.3	592.3	621.3	628.6	710.7	820.2	875.0	968.9	1156.9	1297.9	1319.0
135°	590.1	616.5	642.9	649.5	722.4	819.4	868.0	946.7	1104.1	1222.1	1240.4
137.5°	617.5	643.6	669.8	676.3	739.8	824.5	866.8	933.3	1066.4	1166.3	1181.1
140°	640.3	664.4	688.5	694.4	750.6	825.4	862.7	920.2	1035.2	1121.4	1135.3
142.5°	657.7	680.0	702.2	707.8	759.4	828.3	862.7	913.3	1014.2	1090.0	1101.9
145°	684.5	704.0	723.3	728.1	771.1	828.4	856.9	898.2	980.8	1042.7	1051.8
147.5°	711.2	730.2	749.1	753.8	788.2	834.1	856.9	889.4	954.4	1003.1	1010.6
150°	728.8	745.9	762.9	767.2	797.1	837.0	856.9	884.4	939.2	980.4	986.5
152.5°	746.8	759.8	772.7	776.0	803.0	838.9	856.9	880.4	927.3	962.4	967.0
155°	773.6	783.3	792.8	795.2	815.8	843.2	856.9	875.6	912.9	940.8	943.9
157.5°	793.4	802.8	812.0	814.4	828.6	847.5	856.9	871.4	900.4	922.1	924.3
160°	806.8	814.1	821.4	823.1	834.4	849.5	856.9	869.4	894.2	912.8	914.0
162.5°	820.2	825.7	831.1	832.5	840.6	851.5	856.9	867.4	888.4	904.1	905.2
165°	834.8	839.7	844.6	845.8	849.6	854.5	856.9	864.4	879.5	890.7	891.9
167.5°	848.2	850.5	852.8	853.4	856.5	860.7	862.7	867.7	877.5	884.9	885.4
170°	856.9	859.3	861.6	862.2	862.4	862.6	862.7	867.7	877.5	884.9	884.9
172.5°	861.6	862.1	862.6	862.7	862.7	862.7	862.7	866.7	874.4	880.2	879.7
175°	868.0	868.0	868.0	868.0	866.2	863.9	862.7	865.2	870.1	873.9	873.9
177.5°	868.0	868.0	868.0	868.0	866.7	864.9	864.0	865.9	869.7	872.6	872.1
180°	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	194.8	194.8
2.5°	208.0	206.8
5°	267.6	268.8
7.5°	360.2	359.7
10°	448.0	453.6
12.5°	511.9	513.1
15°	550.8	553.3
17.5°	565.8	566.5
20°	566.5	565.2
22.5°	559.6	558.3
25°	551.4	550.8
27.5°	543.9	544.5
30°	540.7	542.7
32.5°	540.7	543.9
35°	542.0	545.1
37.5°	541.3	545.1
40°	538.8	543.2
42.5°	532.0	535.1
45°	521.3	525.1
47.5°	507.5	510.1
50°	490.0	492.5
52.5°	468.0	468.7
55°	441.8	444.2
57.5°	413.6	414.1
60°	382.2	384.1
62.5°	349.0	349.0
65°	313.9	315.1
67.5°	277.6	280.7
70°	240.6	241.3
72.5°	204.3	204.3
75°	166.6	167.3
77.5°	130.9	130.9
80°	97.1	97.8
82.5°	67.1	68.3
85°	41.9	41.9
87.5°	19.4	17.6
90°	22.1	22.1
92.5°	88.6	71.1
95°	309.1	255.7
97.5°	740.6	639.0
100°	1067.0	946.0
102.5°	1388.1	1284.5
105°	1797.5	1741.8
107.5°	2065.6	2079.1
110°	2167.9	2225.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2177.1	2266.1
115°	2119.3	2242.8
117.5°	1996.9	2133.8
120°	1898.3	2031.4
122.5°	1802.2	1933.5
125°	1665.1	1786.1
127.5°	1541.9	1643.9
130°	1469.3	1563.5
132.5°	1403.3	1487.8
135°	1313.1	1385.9
137.5°	1240.7	1300.2
140°	1190.9	1246.6
142.5°	1149.8	1197.7
145°	1088.1	1124.3
147.5°	1040.7	1070.7
150°	1010.9	1035.2
152.5°	985.4	1003.7
155°	956.0	968.2
157.5°	932.8	941.4
160°	919.0	923.9
162.5°	909.9	914.6
165°	896.8	901.8
167.5°	887.5	889.5
170°	884.9	884.9
172.5°	878.0	876.2
175°	873.9	873.9
177.5°	870.0	868.0
180°	868.0	868.0

(END OF REPORT)